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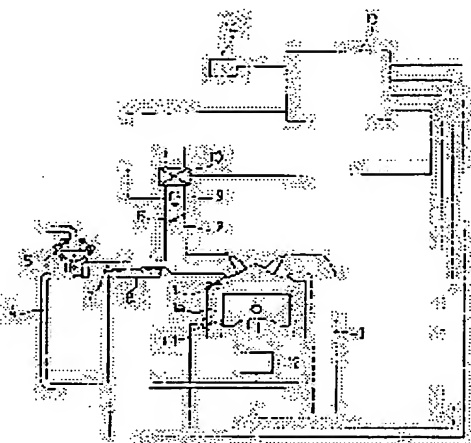
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## (54) FAILURE SENSING UNIT FOR EXHAUST GAS RETURN DIAGNOSIS DEVICE

## (57)Abstract

PURPOSE: To prevent a faulty judgement, by prohibiting discrimination of a failure until warming up of an engine is completed when a failure of an exhaust gas return device is discriminated based on a temperature sensed by a temperature sensor disposed in an exhaust gas return passage.

CONSTITUTION: A temperature sensor 7 using a thermistor is disposed downstream of an exhaust gas return valve 5 of an exhaust gas return passage 4. When a temperature sensed by a temperature sensor 7 is less than a prescribed value regardless of that it is an operating region wherein exhaust gas is returned based on values sensed by an air flow meter 10 and a crank angle sensor 12, a control circuit 13 lights a warning lamp 14 judging that an exhaust gas return device fails. Further, the diagnosis of a failure is prohibited based on a value sensed by a water temperature sensor 11 when a temperature at start is less than a first temperature which is so low that water is frozen in the vicinity of the temperature sensor 7. Then, the diagnosis of a failure is effected only when a water temperature at start is greater than a first temperature and when warming up of an engine has been completed it is greater than a second temperature.



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